

**WHAT IS CLAIMED IS:**

1. An extract from a tuber of a *Dioscorea* plant, wherein the extract is soluble in water and insoluble in an aqueous solution containing 65-90% ethanol between 0°C and 25°C.
2. The extract of claim 1, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.
3. The extract of claim 1, wherein the aqueous solution contains 70-80% ethanol.
4. The extract of claim 3, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.
5. The extract of claim 3, wherein the aqueous solution contains 75% ethanol.
6. The extract of claim 5, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.
7. The extract of claim 6, wherein the *Dioscorea* plant is *D. batatas* Decne.
8. A composition comprising an extract from a tuber of a *Dioscorea* plant and a cytokine.
9. The composition of claim 8, wherein the cytokine is interleukin-2.
10. The composition of claim 9, wherein the *Dioscorea* plant is *D. batatas*.
11. The composition of claim 8, wherein the extract is soluble in water and insoluble in an aqueous solution containing 65-90% ethanol between 0°C and 25°C.

12. The composition of claim 11, wherein the cytokine is interleukin-2.
13. The composition of claim 12, wherein the *Dioscorea* plant is *D. batatas*.
14. The composition of claim 11, wherein the aqueous solution contains 70-80% ethanol.
15. The composition of claim 14, wherein the cytokine is interleukin-2.
16. The composition of claim 15, wherein the *Dioscorea* plant is *D. batatas*.
17. The composition of claim 14, wherein the aqueous solution contains 75% ethanol.
18. The composition of claim 17, wherein the cytokine is interleukin-2.
19. The composition of claim 18, wherein the *Dioscorea* plant is *D. batatas*.
20. A method of enhancing proliferation of bone marrow or spleen cells, the method comprising administering to a subject in need thereof an effective amount of an extract from a tuber of a *Dioscorea* plant.
21. The method of claim 20, wherein the extract is soluble in water and insoluble in an aqueous solution containing 65-90% ethanol between 0°C and 25°C.
22. The method of claim 21, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.
23. The method of claim 21, wherein the aqueous solution contains 70-80% ethanol.

24. The method of claim 23, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.

25. The method of claim 23, wherein the aqueous solution contains 75% ethanol.

26. The method of claim 25, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.

27. The method of claim 20, wherein the bone marrow cells are CFU-GM, CFU-GEMM, or CFU-BFU-E cells.

28. The method of claim 27, wherein the *Dioscorea* plant is *D. batatas* Decne, *D. alata* L., *D. pseudojaponica*, or *D. alata* L. var. *purpurea* (Roxb.) M. Pouch.

29. A method of enhancing proliferation of bone marrow or spleen cells, the method comprising administering to a subject in need thereof an effective amount of an extract from a tuber of a *Dioscorea* plant and an effective amount of a cytokine.

30. The method of claim 29, wherein the cytokine is interleukin-2.

31. The method of claim 30, wherein the *Dioscorea* plant is *D. batatas*.

32. The method of claim 31, wherein the extract is soluble in water and insoluble in an aqueous solution containing 65-90% ethanol between 0°C and 25°C.

33. The method of claim 32, wherein the cytokine is interleukin-2.

34. The method of claim 33, wherein the *Dioscorea* plant is *D. batatas*.

35. The method of claim 32, wherein the aqueous solution contains 70-80% ethanol.

36. The method of claim 35, wherein the cytokine is interleukin-2.
37. The method of claim 36, wherein the *Dioscorea* plant is *D. batatas*.
38. The method of claim 35, wherein the aqueous solution contains 75% ethanol.
39. The method of claim 38, wherein the cytokine is interleukin-2.
40. The method of claim 39, wherein the *Dioscorea* plant is *D. batatas*.
41. The method of claim 28, wherein the bone marrow cells are CFU-GM, CFU-GEMM, or CFU-BFU-E cells.
42. The method of claim 41, wherein the cytokine is interleukin-2.
43. The method of claim 42, wherein the *Dioscorea* plant is *D. batatas*.